Comparisons of Job Characteristics

Focus Occupation: Biological Scientists, All Other (19-1029)

Associated Occupation: Animal Scientists (19-1011)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 78

Focus Occupation: Biological Scientists, All Other (19-1029)

Associated Occupation: Animal Scientists (19-1011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Biology	3.7	21.1	24.4	>>	Current knowledge level is likely more than sufficient
English Language	11.2	17.2	18.2	0	Current knowledge level may be sufficient
Food Production	2.1	17.2	1.2	<<	Extensive education and/or training may be required
Mathematics	9.2	15.7	14.7	0	Current knowledge level may be sufficient
Chemistry	4.8	14.9	16.4	>	Current knowledge level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Biological Scientists, All Other (19-1029) Associated Occupation: Animal Scientists (19-1011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Reading Comprehension	10.7	15.4	18.5	>	Skill level is likely sufficient
Science	4.5	15.1	16.1	0	Current skill level may be sufficient
Writing	9.2	14.6	16.2	>	Skill level is likely sufficient
Judgment and Decision Making	9.4	13.3	13.2	0	Current skill level may be sufficient
Complex Problem Solving	9.1	13.2	13.1	0	Current skill level may be sufficient
Systems Evaluation	6.4	10.7	10.5	0	Current skill level may be sufficient
Systems Analysis	6.5	10.6	11.0	0	Current skill level may be sufficient
Mathematics	6.2	9.8	12.6	>>	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 97

Focus Occupation: Biological Scientists, All Other (19-1029) Associated Occupation: Animal Scientists (19-1011)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	16.5	18.5	>	Current ability level is likely sufficient
Oral Comprehension	12.5	16.4	17.9	0	Current ability level may be sufficient
Oral Expression	12.4	16.0	17.1	0	Current ability level may be sufficient
Inductive Reasoning	10.2	14.9	16.1	0	Current ability level may be sufficient
Written Expression	9.8	14.5	17.9	>>	Current ability level is likely more than sufficient
Deductive Reasoning	10.6	14.2	15.6	0	Current ability level may be sufficient
Problem Sensitivity	11.1	13.6	14.4	0	Current ability level may be sufficient
Near Vision	11.1	12.6	13.9	>	Current ability level is likely sufficient
Information Ordering	9.9	12.3	13.0	0	Current ability level may be sufficient
Category Flexibility	9.0	11.8	13.2	>	Current ability level is likely sufficient
Fluency of Ideas	7.6	11.1	12.6	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 82

Focus Occupation: Biological Scientists, All Other (19-1029) Associated Occupation: Animal Scientists (19-1011)

Tools and Technologies	Exclusivity
Autoclave and sterilizer equipment and accessories	12
Business function specific software	1
Chemical evaluation instruments and supplies	10
Chromatographic measuring instruments and accessories	16
Clinical and diagnostic analyzers and accessories and supplies	18
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
General laboratory glassware and plasticware and supplies	13
Indicating and recording instruments	2
Industry specific software	1

Information exchange software	1
Laboratory baths	24
Laboratory centrifuges and accessories	13
Laboratory electrophoresis and blotting system and supplies	26
Laboratory enclosures and accessories	17
Laboratory heating and drying equipment	13
Laboratory incubating equipment	20
Laboratory ovens and accessories	15
Laboratory pumps and tubing	23
Network applications software	1
Pipettes and liquid handling equipment and supplies	16
Spectroscopic equipment	10
Viewing and observing instruments and accessories	4
Weight measuring instruments	7

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.